

Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed**1.1. Name of the Data, data collection Project, or data-producing Program:**

2015 Lidar DEM: Municipality of Anchorage, AK

1.2. Summary description of the data:

The base LiDAR deliverables will conform to USGS LBS specifications V1.4 for Quality Level 2 (QL2) data.

The QL2 requires collection of 2 points per square meter (ppsm), nominal LiDAR pulse spacing of no greater

than 0.7 meter for 463 square miles and 4 PPSM for 494 sq. miles and a vertical accuracy of better than 10-cm

RMSE. (Merrick will provide data to a 9.25cm vertical accuracy in the interest of meeting a 1 foot contour

accuracy specification and this will still meet the QL2 specification).

These files contain rasterized topographic lidar elevations at a 3 ft grid spacing.

The NOAA Office for Coastal Management (OCM) downloaded this DEM data from the AK DGGs site, processed it, and made it available on the NOAA Digital Coast. In addition to this bare earth digital elevation model (DEM) raster data, lidar point and breakline data are also available. Links to these data are located in the URL section of this metadata record. The breakline data has not been reviewed by OCM and is made available at the user's discretion.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

2015-05-10 to 2015-05-31

1.5. Actual or planned geographic coverage of the data:

W: -150.286492, E: -148.773377, N: 61.49475, S: 60.732991

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Model (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: ALS70 HP

Platform: Aircraft

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:

coastal.info@noaa.gov

2.5. Phone number:

(843) 740-1202

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (

specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2016-11-29 00:00:00 - LIDAR data was collected using McElhanney's ALS70 HP LIDAR sensor. The raw data was verified in MARS software for complete coverage of the project area, and boresighted to align the flightlines. Raw data files were parsed into manageable client-specific tiles. These tiles were then processed through automated filtering that separates the data into different classification groups: unclassified points, ground points, low points, water, ignored ground, Bridge Decks and Culverts. The data was next taken into MARS to reclassify the erroneous points that may remain in the LIDAR point cloud after auto filter.
- 2016-11-29 00:00:00 - Using MARS software ESRI float grid files (.flt/.hdr) files are created with a one meter cell size. The ground classified LIDAR points plus the hydro breaklines are used to create these files. The breaklines are rivers greater than 30m wide and waterbodies larger than 2 square acres in size. The .flt files are imported to Erdas Imagine (.img) files. The tiles are delivered in 1000m by 1000m tiles. (Citation: Lidar)
- 2017-11-21 00:00:00 - The NOAA Office for Coastal Management (OCM) downloaded the Anchorage 2015 DTM grid data from the Alaska Division of Geological & Geophysical Surveys (DGGS) Elevation Portal (<http://elevation.alaska.gov/#64.99794:-155.47852:4>) in October 2017. The raster files were in .img format and AK State Plane Zone 4, NAD83, feet coordinates. The elevations were in NAVD88 ft. The grid spacing was 3 ft. OCM did the following processing to the data for Digital Coast storage and provisioning purposes: 1. Converted the raster files from elevations in feet to meters using GDAL translate from GDAL version 2.1.2 2. Copied the raster files to database and https

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented,

specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
 - 7.1.1. If data are not available or has limitations, has a Waiver been filed?
 - 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

<https://www.fisheries.noaa.gov/inport/item/50332>

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

https://coast.noaa.gov/htdata/raster2/elevation/AK_Anchorage_DEM_2015_8431

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=8431>

7.3. Data access methods or services offered:

Users may access the data from two links. Custom download and bulk download options are available.

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Office for Coastal Management - Charleston, SC

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.